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## UTILITY

4041J-000746 Attorney Docket No. First Inventor Hiroyasu SHIMANUKI et al Heat Exchanger For Cooling Air Title

PATENT APPLICATION TRANSMITTAL EL 623 486 936 US (Only for new nonprovisional applications under 37 C.F.R. 1.53(b)) Express Mail Label No. Mail Stop Patent Application **APPLICATION ELEMENTS** Commissioner for Patents ADDRESS TO: P.O. Box 1450 See MPEP chapter 600 concerning utility patent application contents. Alexandria, VA 22313-1450 1. 🛛 Fee Transmittal Form (e.g., PTO/SB/17) 7. CD-ROM or CD-R in duplicate, large table or (Submit an original and a duplicate for fee processing) Computer Program (Appendix) 2. Applicant claims small entity status. 8. Nucleotide and/or Amino Acid Sequence Submission See 37 CFR 1.27. (if applicable, all necessary) з. 🔯 Specification [Total Pages a. Computer Readable Form (CRF) (preferred arrangement set forth below) b. Specification Sequence Listing on: Descriptive title of the Invention i. CD-ROM or CD-R (2 copies); or Specification - Cross References to Related Applications filed in English ii. 🔲 paper - Statement Regarding Fed sponsored R & D c. Statements verifying identity of above copies - Reference to sequence listing, a table, or a computer program listing appendix **ACCOMPANYING APPLICATIONS PARTS** - Background of the Invention 9. 🛛 - Brief Summary of the Invention Assignment Papers (cover sheet & document(s)) - Brief Description of the Drawings ( if filed) 10. 37 C.F.R.§3.73(b) Statement Power of - Detailed Description (when there is an assignee) Attorney - Claim(s) - Abstract of the Disclosure 11. 🔲 English Translation Document (if applicable) 4. 12. 🛛 Information Disclosure Copies of IDS Drawing(s) (35 U.S.C.113) [Total Sheets] Statement (IDS)/PTO-1449 Citations 5. Oath or Declaration [Total Pages **Preliminary Amendment** 13. 🔲 a. Newly executed (original or copy) 14. Return Receipt Postcard (MPEP 503) b. Copy from a prior application (37 CFR 1.63 (d)) (Should be specifically itemized) (for a continuation/divisional with Box 18 completed) 15. 🛛 Certified Copy of Priority Document(s) DELETION OF INVENTOR(S) (if foreign priority is claimed) Signed statement attached deleting inventor(s) 16. 🗍 Request and Non Publication under 35 U.S.C. 122 named in the prior application, see 37 CFR (b)(2)(B)(i). Applicant must attach form PTO/SB/35 1.63(d)(2) and 1.33(b). or its equivalent. 6. Application Data Sheet. See 37 CFR 1.76 17. Other: \_ 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76: □ Continuation □ Divisional ☐ Continuation-in-part (CIP) of prior application No: Prior application information: Examiner Group / Art Unit: \_ For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 17. CORRESPONDENCE ADDRESS Correspondence address below □ Customer Number or Bar Code Label (Insert Customer No. or Attach bar code label here) Harness, Dickey & Pierce, P.L.C. Name P.O. Box 828 Address City **Bloomfield Hills** MI 48303 State Zip Code Country United States of America Telephone 248-641-1600 Fax 248-641-0270

| Name (Print/Type) | H. Keith Miller, Esq. | Registration No. (Attorney/Agent) | 22,484        |
|-------------------|-----------------------|-----------------------------------|---------------|
| Signature         | DIGISIAL              | Date                              | July 18, 2003 |

PTO/SB/17 (01-03)

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| FEE TRANSMITTAL<br>for FY 2003  |  |   |                 | Complete If Known                                      |  |                   |                                     |                          |                                     |                                       |          |          |
|---|--|---|-----------------|--|--|-------------------|-------------------------------------|--------------------------|-------------------------------------|---------------------------------------|----------|----------|
|   |  |   |                 | Application Number unassigned yet                      |  |                   |                                     |                          |                                     |                                       |          |          |
|   |  |   |                 | Filing Date .  |  |                   | July 1                              | July 18, 2003            |                                     |                                       |          |          |
| 101 1 1 2003  |  |   |                 |  | First Named Inventor                   |                   |                                     | Hiroyasu SHIMANUKI et al |                                     |                                       |          |          |
| Patent fees are subject to annual revision.   |  |   |                 |  | Examiner Name                          |                   |                                     | -,                       | <del> </del>                        |                                       |          |          |
| Applicant claims small entity status. See 37 CFR 1.27   |  |   |                 | 27   |  | Group / Art Unit  |                                     |                          |                                     |                                       |          |          |
| TOTAL AMOUNT OF PAYMENT (\$) 790  |  |   |                 | Attorney Docket No. 4041J-000746                       |  |                   |                                     |                          |                                     |                                       | J        |          |
| METHOD OF PAYMENT (check all that apply)  |  |   |                 |  |  |                   |                                     | FEE C                    | ALCULATION (co                      | ntinued)                              |          |          |
| ☑ Check ☐ Credit card ☐ Money ☐ Other ☐ None  |  |   |                 | 3. ADD   |  | L FEES<br>Small E | mele.                               |                          |                                     |                                       |          |          |
| Order  Deposit Account:   |  |   |                 |  |  |                   |                                     |                          |                                     |                                       |          |          |
| Deposit   |  |   |                 | ı  | Fee<br>Code                            | Fee<br>(\$)       | Fee<br>Code                         | Fee<br>(\$)              | Fee De                              | scription                             | Fee Paid |          |
| Account 08-0750<br>Number   |  |   |                 | 1051   | 130                                    | 2051              | 65                                  | Surcharge - late         | -                                   |                                       | 1        |          |
|   |  |   | 1052            | 50   | 2052                                   | 25                | Surcharge - late<br>or cover sheet. | provisional filing fee   |                                     |                                       |          |          |
| Deposit Account Hamess, Dickey & Pierce, P.L.C. Name  |  |   |                 | 1053   | 130                                    | 1053              | 130                                 | Non-English spe          |                                     | <u> </u>                              | ┨        |          |
|   |  |   |                 | 1812<br>1804   | 2,520<br>920*                          | 1812<br>1804      | 2,520<br>920*                       | - ,                      | est for reexamination               | <b> </b>                              | ┨        |          |
| The Commissioner is authorized to: (check all that apply)   |  |   |                 |  | ł                                      |                   |                                     |                          | Examiner action                     |                                       |          | ┨        |
| ☐ Charge fee(s) indicated below ☐ Credit any overpayments ☐ Charge any additional fee(s) during the pendency of this application ☐ Charge fee(s) indicated below, except for the filing fee |  |   |                 | 1805   | 1,840*                                 | 1805              | 1,840*                              | Examiner action          |                                     |                                       |          |          |
|   | idicated below, <b>exce</b><br>fied deposit account. |   | e               |  | 1251<br>1252                           | 110<br>410        | 2251<br>2252                        | 55<br>205                | •                                   | oly within first month                | <u> </u> | ┨        |
|   | FEE CALCUI   |   |                 |  | 1252                                   | 410               | 2252                                | 205                      | month                               | oly within second                     |          |          |
| 1. BASIC FILI   | NG FEE   |   |                 |  | 1253                                   | 930               | 2253                                | 465                      |                                     | oly within third month                |          | ]        |
|   | Small Entity<br>ee Fee Fee D                         | logodnájem                              |                 |  | 1254                                   | 1,450             | 2254                                | 725                      | Extension for rep<br>month          | oly within fourth                     |          |          |
|   | ee ree <u>reeb</u><br>ode (\$)                       | escription                              | Fee Paid        |  | 1255                                   | 1,970             | 2255                                | 985                      | Extension for rep                   | oly within fifth month                |          | ]        |
| 1001 750 20   | 001 375 Utility                                      | 375 Utility filing fee 750              |                 |  | 1401                                   | 320               | 2401                                | 160                      | Notice of Appeal                    |                                       |          | 4        |
| 1002 330 20   | 002 165 Desig  | n filing fee                            |                 |  | 1402                                   | 320               | 2402                                | 160                      | -                                   | upport of an appeal                   |          | 1        |
| 1003 520 20   | 003 260 Plant  | filing fee                              |                 |  | 1403                                   | 280               | 2403                                | 140                      | Request for oral                    | -                                     | <u> </u> | 4        |
|   |  | ue filing fee                           |                 | 4  | 1451                                   | 1,510             | 1451                                | 1,510                    | Petition to institu<br>proceeding   | ne a public use                       | 1        |          |
| 1005 160 2005 80 Provisional filling fee  |  |   |                 | 1452   | 110                                    | 2452              | 55                                  | Petition to revive       | – unavoidable                       |                                       | 1        |          |
| SUBTOTAL (1) (\$) 750   |  |   |                 |  | 1453                                   | 1,300             | 2453                                | 650                      | Petition to revive                  | - unintentional                       |          | ]        |
|   |  |   |                 |  | 1501                                   | 1,300             | 2501                                | 650                      | •                                   | ility issue fee (or reissue)          |          |          |
| 2. EXTRA CLAIM  | Extra  | a Fee from                              | Fee             |  | 1502                                   | 470               | 2502                                | 235                      | Design issue fee                    | )                                     | ļ        | 1        |
|   | Clair  |   | _Paid           |  | 1503                                   | 630               | 2503                                | 315                      | Plant issue fee                     |                                       | ļ        | -        |
| Total Claims 10   | -20** = 0  | ] ×                                     | = 0             | <b>⊒</b> .   | 1460                                   | 130<br>50         | 1460<br>1807 -                      | 130<br>- 50              | Petitions to the C                  | commissioner<br>inder 37 CFR 1.17 (a) |          | -        |
| Independent<br>Claims 1   | -3 ** = 0  | x                                       | = 0             |  | 1806                                   | 180               | 1806                                | 180                      |                                     | ntormation Disclosure                 |          | 1        |
| Multiple<br>Dependent   |  | ×                                       | = 0             |  | 8021                                   | 40                | 8021                                | 40                       | -                                   | patent assignment                     | 40       | 1        |
| Large Entity  | Small Entity   |   |                 |  |  |                   |                                     | 40                       | properties)                         | O NORIDGE OF                          |          |          |
| Fee Fee<br>Code (\$)  | Fee Fee <u>F</u><br>Code (\$)                        | ee Description                          |                 |  | 1809                                   | 750               | 2809                                | 375                      | Filing a submiss<br>(37 CFR § 1.129 | ion after final rejection             |          | -        |
| 1202 18   | , ,  | laims in excess of 2                    | 20              |  | 1810                                   | 750               | 2810                                | 375                      |                                     | nal invention to be                   | -        | 1        |
| 1201 84   | 2201 42 ir   | ndependent claims i                     | n excess of 3   |  | ł                                      |                   | }                                   |                          | examined (37 Cl                     |                                       |          |          |
| 1203 280  | 2203 140 M   | lultiple dependent c                    | laim, if not pa | id   | 1801                                   | 750               | 2801                                | 375                      | Request for Continu                 | ued Examination (RCE)                 |          |          |
| 1204 84   |  | * Reissue independe<br>riginal patent   | ent claims ov   | er   | 1802                                   | 900               | 1802                                | 900                      | Request for exped                   |                                       |          | 1        |
| 1205 18   |  | * Reissue claims in ver original patent | excess of 20    | and  |  |                   |                                     |                          | of a design applic                  | auuri                                 |          | -        |
|   |  |   |                 |  | Other fe                               | e (speci          | ıry)                                |                          |                                     |                                       |          |          |
| SUBTOTAL (2) (\$) 0   |  |   |                 | *Reduc   | ed hv P                                | asic Filing       | ı Fee P                             | aid SURT                 | OTAL (3)                            |                                       |          |          |
| **or number previously paid, if greater; For Reissues, see above  |  |   |                 | *Reduced by Basic Filing Fee Paid SUBTOTAL (3) (\$) 40 |  |                   |                                     |                          |                                     |                                       |          |          |
|   |  |   |                 |  |  |                   |                                     |                          | _                                   |                                       |          |          |
| SUBMITTED BY  |  |   |                 |  |  |                   |                                     |                          | Com                                 | plete (if applicable)                 |          | $\dashv$ |
| Name (Print/Type) H. Keith Miller, Esq. Registration No. Attorney   |  |   |                 |  | y/Agent) 22,484 Telephone 248-641-1600 |                   |                                     |                          | 248-641-1600                        |                                       | _        |          |
| Signature 1997  |  |   |                 |  |  |                   |                                     |                          | Date                                | July 18, 2003                         |          |          |